

# Pest Update (July 7, 2010)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insect from other states. If you live outside of South Dakota and have a question, please send a digital picture of the pest or problem instead. **Walnut samples may not be sent in from any location – please provide a picture instead.**

## Available on the net at:

<http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx>

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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## **Plant development for the growing season**

We are seeing the smokebush in bloom across the state we are about on schedule for the year regarding plant and pest development, if not a little ahead.

## **Treatments to do now**

**Apple maggot (*Rhagoletis pomonella*) is one of the insects that can infest apples in our state and is the most serious apple pest in the eastern half of our state.** Now is the time to begin treatments. Please see the last issue of the Update for more information on symptoms, signs and control of this insect.

## **Current concerns**



**Questions on curled ash leaves are coming in and when I stop by an extension office while on the road this week they had a couple of samples.**

The ash leaf curl aphid, also known as the woolly ash aphid (*Prociphilus fraxinifolii*) is showing up across the state again this year as it frequently does each summer. The symptoms are curled leaves forming rosettes at the ends of ash shoots; particularly the rapid growing terminal

shoots. If you unfolded the leaves you'll find these little "fuzzballs" that are aphids. You might also find lady beetle larvae that are feeding on the insects. Control is usually either letting it be – since any treatment will not uncurl the leaves and the lady beetles do a pretty good job of control. – but acephate (sold as Orthene Turf, Tree and Ornamental Spray) is a systemic pesticide that will kill the aphids as they feed. Most other insecticides are contact poisons and will not reach the aphids living inside the curls.

**Rain, rain, go away.** I am still receiving lots of calls on wilting cherries and this is mostly related to the high water table (or standing water). Cherries, as with many other stone fruits such as apricots and peaches, do not tolerate even wet soils for more than a few days. These water-logged trees are already wilting and dying.

## **E-samples**

**As any reader to the Update can attest, spruces are a commonly submitted sample.** I am still receiving e-samples and mailed samples of spruce with drooping and curled shoot tips and the majority of these symptoms can be



attributed to environmental conditions rather than an insect, mite or pathogen. There have been numerous reports of curled and twisted spruce tips, often on the south sides of the trees, that are due to the late spring frosts much of the state experienced in May just as the new foliage was expanding. Drying winds are also a major factor in some of the injury we are seeing across the state. Again, neither of these stressors can be managed with any

spray and just simply have to be chalked up to another problem due to our temperature fluctuations that are a frequent occurrence in the spring or fall.



**The wet soils are also possibly contributing to the problems we are seeing on spruce.** I have

received a few samples of spruce exhibiting symptoms of yellowing needles including this one from Tracy in Kingsbury County. Usually the previous year's needles and often the tips of these affected needles are yellow but the very tip of the needle is still green. The symptoms do not exactly match those of weir's cushion rust, nor are any of the fruiting structures associated with this disease found, nor those of any other disease. Instead, these symptoms may be linked to a nutrient (element) deficiency due to the wet soils limiting uptake. I frequently see this in pines during a wet, cold spring and usually by this time of year

the symptoms disappear. However, this year the symptoms are persisting and are also appearing on spruce. Merely adding a fertilizer may not help as the real problem is the moist soils reducing uptake. We'll just have to wait it out and see if the weather turns dry and the plants recover.



**A "miner" problem on birch.** Chris, down in Minnehaha County, had an interesting sample of a river birch with blotches on the leaf. If you look closely at the blotches you'll notice that the upper and lower leaf tissue is intact but the interior is gone and replaced with tiny pellets. The pellets are frass (insect poop) and the missing tissue is due to the feeding by the birch leafminer (*Fenusa pusilla*) a small insect that feeds in the larval stage inside the leaf. The larvae

hatch on the newly expanded leaf and feed for several weeks before dropping to the soil and pupating. There are two generations per year so adults are usually out in mid to late June and lay eggs on the newest foliage and the cycle begins

again. This insect feeds on the leaves of all birch but seems to be most noticeable on river birch. Generally control is not necessary as an otherwise healthy birch can withstand having almost 2/3's of its leaves mined before it is significantly stressed by the event. If control is desired, a spray of acephate (sold as Orthene Turf, Tree and Ornamental Spray) can be applied to the leaves about 10 days after bud break in the spring. This will kill the first generation of miners and these are the ones to control.



**Leaf spot on white poplar.** Another interesting leaf sample came from Renee in Tripp County. The leaves of a white poplar (*Populus alba*) are developing spots and blotches. The spots begin as tiny dots on the upper surface of the leaf and eventually turn to dark brown blotches on a yellowing leaf. The leaves usually begin to fall about now. The symptoms are due to marssonina leaf spot,

a fungus disease can be found on aspen, cottonwoods and a number of other poplar species. We usually do not see the disease on white poplars but perhaps the continuously wet weather has allowed the infection to become more severe than normal. There is no control for the disease at this time of year, the damage is already done, nor are preventative controls generally recommended for white poplars since the disease is rarely a problem.



**Dutch elm disease is appearing across the state.** The most common symptoms are flagging, yellowing and wilting leaves in the canopy of the tree. Often the symptoms occur on just a branch or perhaps only a portion of the canopy. If the symptomatic branch is slit to reveal the sapwood, the infected tissue will have green streaks in the wood. The streaking is generally enough to cause the tree to be marked for removal though this

tissue can also be placed in a culture to "grow" the fungus for a positive identification. Dutch elm diseased trees are being marked by survey crews in a number of communities and their work can be seen by the number of red "X" painted on the trunks of elms exhibiting flagging. I often receive calls from tree owners that want me to stop the city from removing their infected tree under the hope that it will recover in a year or two. While have a second opinion on the diagnosis is reasonable, leaving an infected tree under the misplaced hope it will recover is not. Communities such as Brookings that have a strong policy on the prompt removal of infected trees still have a significant elm population as they are removing the sources of future infections. Communities that instead have opted for allow infected trees to linger for a few years often are then faced with the removal of a pocket of dead elms rather than just one.

## **Samples received**

Campbell County

**These are some hackberry leaves from Selby. The leaves are cupping and are distorted. What might be the problem?**

Hackberry are sensitive to 2,4-D drift and this type of injury is common for hackberries in the vicinity of an application of this or related herbicides.

Marshall County

**What is wrong with these hackberry leaves?**

The sample was a little on the dry and crumbly side but it appears that the leaves are smaller than normal and have already started to fall. I have seen this on a number of trees this spring and summer, as I do every year, and this injury is usually attributed to environmental conditions such as a spring cold snap. The trees may end up looking a little bare this summer but they typically come back just fine the following year.